



SOLAR PHOTOVOLTAIC ENERGY INSTALLATION KIT



Photovoltaic solar energy kit for the generation of electrical energy.

TRAINING OBJECTIVES

- To investigate how the solar irradiation influences the solar panel output voltage
- To calculate the inner resistance of the solar panels
- To obtain a daily irradiation curve
- To cover the solar panel with different materials
- To charge the battery using solar energy
- To use both solar power and energy stored in the battery to power the DC load
- To test the complete system

TECHNICAL SPECIFICATIONS

- Two photovoltaic inclinable panels, 90W, 12V.
- A supporting **frame** for the panel.
- An electronic current regulation module, with LCD screen, output 12 V, 30 A.
- An inverter, with output at mains voltage, 12 V, 30 A, 300 W.
- A battery control switch, 0-600 V, 32A with battery, 100 Ah.
- Two mains voltage lamps, dichroic 35W and LED 3W, with independent switches.
- Two 12V lamps, dichroic 20 W and LED 3W, with independent switches.
- Cables, connectors and accessories.
- A frame for supporting the electrical components of the system: lamps, switches, protections, etc.

The trainer is complete with installation manual.